

Remarks/Arguments

Claims 1-11 are pending in this application, and are rejected in the Office Action of November 28, 2008. Claims 4, 7 and 8 are indicated as containing allowable subject matter. Claim 5 is not expressly rejected over any prior art, and is thereby deemed to also contain allowable subject matter. Applicant appreciates the Examiner's indication of allowable subject matter. However, as will be explained hereinafter, Applicant has amended claims 1-11 in a manner deemed to overcome the instant rejections, without incorporating this allowable subject matter into the independent claims.

Re: Drawings

The Examiner submits that FIGS. 1A and 2A should be designated by a legend such as "Prior Art" as described in Applicant's specification, sections 0009 and 0010. In response, Applicant herein submits revised FIGS. 1A and 2A.

Re: Rejection of Claims 1-11 under 35 U.S.C. §112, Second Paragraph

Claims 1-11 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite. In particular, the Examiner has cited various instances of alleged indefiniteness in the claims. In response, Applicant has amended claims 1-11 herein to more particularly point out and distinctly claim the subject matter regarded as the invention. In these amendments, Applicant has attempted to address each of the instances of indefiniteness alleged by the Examiner. In view of these amendments, Applicant submits that claims 1-11 are clear and definite, and respectfully requests withdrawal of the rejection.

Re: Rejection of Claim 1 under 35 U.S.C. §102(b)

Claim 1 is rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,400,664 issued to Shimano et al. (hereinafter, "Shimano"). Applicant respectfully traverses this rejection for at least the following reasons.

Independent claim 1, as amended herein, recites:

"An appliance for reading from and/or writing to optical recording media, said appliance comprising:
means for deriving a first error signal only from signals of photodetector segments associated with a main beam;
means for deriving a second error signal different from the first error signal only from signals of photodetector segments associated with a secondary beam;
means for deriving a differential focus error signal from the first error signal and the second error signal; and
means for forming a land groove detection signal by combining the first error signal multiplied by a first branch weight with the second error signal multiplied by a second branch weight." (emphasis added)

As indicated above, amended independent claim 1 defines an appliance for reading from and/or writing to optical recording media in which, *inter alia*, "a differential focus error signal" and "a land groove detection signal" (aka, track type signal or track error signal) are both derived from the same "first error signal" and "second error signal."

Shimano fails to disclose or suggest at least the aforementioned feature of the claimed invention. This is clearly evidenced by the formulas shown in FIG. 4 of Shimano. In particular, considering error signals derived "only from ... main beam" (a,b,c,d), Shimano uses "a-b+c-d" for the focus error signal AF, but uses "a-b-c+d" for the tracking error signal TR. In other words, Shimano does not use the same first error signal for deriving both a differential focus error signal and a land groove detection signal (aka, track type signal or track error signal). Similarly, with respect to signals derived "only from ... secondary beam" (e,f,g,h,i,j,k,l), Shimano does not use the same second error signal for deriving both a differential focus error signal and a land groove detection signal (aka, track type signal or track error signal). Accordingly, Shimano fails to disclose or suggest each and every element of independent claim 1, and withdrawal of the rejection is respectfully requested.

Re: Rejection of Claims 2, 3, 6 and 9-11 under 35 U.S.C. §102(b)

Claims 2, 3, 6 and 9-11 are rejected under 35 U.S.C. §102(b) as being anticipated by Shimano. Applicant respectfully traverses this rejection for at least the following reasons.

Independent claim 2, as amended herein, recites:

"A method for generating a track type signal using a scanning unit for an optical recording medium having data stored in tracks, wherein the scanning unit includes an objective lens and a focus control loop, and is operative to produce a main beam and at least one secondary beam and to evaluate light reflected from the optical recording medium with a plurality of photodetector segments associated with the main beam and the at least one secondary beam, the method comprising steps of:

deriving a first error signal only from signals of the photodetector segments associated with the main beam;

deriving a second error signal different from the first error signal only from signals of the photodetector segments associated with the at least one secondary beam;

scanning the optical recording medium with a scanning beam;

deflecting the objective lens in a focus direction;

measuring first and second measurement signals which contain, in different proportion, a first component that depends on a distance of the objective lens relative to the optical recording medium and a second component that depends on a position of the scanning beam relative to the tracks on the optical recording medium;

deriving an evaluation signal from the first and second measurement signals;

deriving first and second branch weights from the evaluation signal; and

forming the track type signal by combining the first error signal multiplied by the first branch weight with the second error signal multiplied by the second branch weight."

Under item 6(a) of the Office Action dated November 28, 2008, the Examiner appears to equate both the claimed "first error signal" and "second error signal" with Shimano's "AF" signal. Applicant assumes this is due to the fact that, prior to the instant amendment, independent claim 2 did not expressly state that: (i) the "first error signal" and "the second error signal" are not the same thing, and (ii) the "first error signal" and the "second error signal" are derived exclusively from the main beam and secondary beam photodetector signals, respectively. To clarify this issue, and more

clearly distinguish the claimed invention over Shimano, independent claim 2 is amended herein to recite "deriving a first error signal only from the signals of the photodetector segments associated with the main beam" and "deriving a second error signal different from the first error signal only from the signals of the photodetector segments associated with the at least one secondary beam" (emphasis added).

Moreover, with respect to the previous language of independent claim 2 stating "... measurement signals which are formed differently and contain details..." (emphasis added), by equating the claim term "differently" with the "push-pull" technique of Shimano (see 4th line from the bottom of page 7), it appears that the Examiner is interpreting the term "differently" as involving a difference operation. To clarify this issue, and more clearly distinguish the claimed invention over Shimano, independent claim 2 is amended herein to recite "... measurement signals which contain, in different proportion, a first component that depends on a distance of the objective lens relative to the optical recording medium and a second component that depends on a position of the scanning beam relative to the tracks on the optical recording medium" (emphasis added).

With respect to the previous language of independent claim 2 stating "setting of branch weights", which Examiner ostensibly equates to Shimano's "gain", this claim element is amended to "deriving first and second branch weights from the evaluation signal" to more clearly distinguish the claimed invention over Shimano.

Finally, Applicant notes that independent claim 11 is amended to recite subject matter similar to independent claim 1, and is thereby deemed allowable for at least the same reasons discussed above in conjunction with independent claim 1.

Accordingly, for at least the foregoing reasons, Applicant submits that Shimano fails to disclose or suggest each and every element of claims 2, 3, 6 and 9-11, and withdrawal of the rejection is respectfully requested.

Conclusion

In view of the foregoing remarks/arguments and accompanying amendments, the Applicant believes this application stands in condition for allowance. Accordingly, reconsideration and allowance are respectfully solicited. If, however, the Examiner is of the opinion that such action cannot be taken, the Examiner is invited to contact the Applicant's attorney at (609) 734-6813, so that a mutually convenient date and time for a telephonic interview may be scheduled. Please charge the fee for the two (2) month extension of time to Deposit Account 07-0832.

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April 28, 2009